

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/716,189
Source: IFWO
Date Processed by STIC: 5/23/05

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 05/23/2005

PATENT APPLICATION: US/10/716,189

TIME: 11:56:43

Input Set : N:\Crf3\RULE60\10716189.raw

Output Set: N:\CRF4\05232005\J716189.raw

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1 <110> APPLICANT: Nardin, Elizabeth
2   Moreno, Alberto
3 <120> TITLE OF INVENTION: UNIVERSAL T-CELL EPITOPES FOR ANTI-MALARIAL VACCINES
4 <130> FILE REFERENCE: 5986/1B615-US1
5 <140> CURRENT APPLICATION NUMBER: 10/716,189
6 <141> CURRENT FILING DATE: 2003-11-17
7 <150> PRIOR APPLICATION NUMBER: US/09/060,450
8 <151> PRIOR FILING DATE: 1998-01-21
9 <150> PRIOR APPLICATION NUMBER: 60/033,916
10 <151> PRIOR FILING DATE: 1997-01-21
11 <160> NUMBER OF SEQ ID NOS: 11
12 <170> SOFTWARE: FastSEQ for Windows Version 3.0
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 12
16 <212> TYPE: PRT
17 <213> ORGANISM: P. falciparum
18 <400> SEQUENCE: 1
19   Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro
20   1             5             10
22 <210> SEQ ID NO: 2
23 <211> LENGTH: 8
24 <212> TYPE: PRT
25 <213> ORGANISM: P. falciparum
26 <400> SEQUENCE: 2
27   Asn Val Asp Pro Asn Ala Asn Pro
28   1             5
30 <210> SEQ ID NO: 3
31 <211> LENGTH: 20
32 <212> TYPE: PRT
33 <213> ORGANISM: P. falciparum
34 <400> SEQUENCE: 3
35   Glu Tyr Leu Asn Lys Ile Gln Asn Ser Leu Ser Thr Glu Trp Ser Pro
36   1             5             10             15
37   Cys Ser Val Thr
38             20
40 <210> SEQ ID NO: 4
41 <211> LENGTH: 16
42 <212> TYPE: PRT
43 <213> ORGANISM: P. falciparum
44 <400> SEQUENCE: 4
45   Asp Pro Asn Ala Asn Pro Asn Val Asp Pro Asn Ala Asn Pro Asn Val
46   1             5             10             15
48 <210> SEQ ID NO: 5

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49 <211> LENGTH: 10
50 <212> TYPE: PRT
51 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <223> OTHER INFORMATION: Poly-alanine peptide containing DR 1, 4, 7 and 13
54     allele specific binding motifs for use as indicator peptide.
55 <400> SEQUENCE: 5
56     Gly Phe Lys Ala Ala Ala Ala Ala Ala
57         1             5             10
59 <210> SEQ ID NO: 6
60 <211> LENGTH: 9
61 <212> TYPE: PRT
62 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Poly-alanine peptide containing DR 3 allele specific
65     binding motifs for use as indicator peptides.
66 <400> SEQUENCE: 6
67     Ile Ala Tyr Asp Ala Ala Ala Ala
68         1             5
70 <210> SEQ ID NO: 7
71 <211> LENGTH: 10
72 <212> TYPE: PRT
73 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Poly-alanine peptide containing DR 8 allele specific
76     binding motifs for use as indicator peptide.
77 <400> SEQUENCE: 7
78     Gly Tyr Arg Ala Ala Ala Ala Ala Leu
79         1             5             10
81 <210> SEQ ID NO: 8
82 <211> LENGTH: 13
83 <212> TYPE: PRT
84 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: UD4 peptide containing DR 4 allele specific binding
87     motifs for use as indicator peptide.
88 <400> SEQUENCE: 8
89     Tyr Pro Lys Phe Val Lys Gln Asn Thr Leu Lys Ala Ala
90         1             5             10
92 <210> SEQ ID NO: 9
93 <211> LENGTH: 36
94 <212> TYPE: PRT
95 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Fusion of Carboxyl Terminus of SEQ ID NO:4 to
98     Amino Terminus of Seq ID NO: 3, designated T*T1
99 <400> SEQUENCE: 9
100     Glu Tyr Leu Asn Lys Ile Gln Asn Ser Leu Ser Thr Glu Trp Ser Pro
101         1             5             10             15

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102      Cys Ser Val Thr Asp Pro Asn Ala Asn Pro Asn Val Asp Pro Asn Ala
103              20                      25                      30
104      Asn Pro Asn Val
105              35
107 <210> SEQ ID NO: 10
108 <211> LENGTH: 28
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Fusion of Carboxyl Terminus of SEQ ID NO:4 to
113      Amino Terminus of Seq ID NO: 1, designated T1B
114 <400> SEQUENCE: 10
115      Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro Asp Pro Asn Ala
116      1              5              10              15
117      Asn Pro Asn Val Asp Pro Asn Ala Asn Pro Asn Val
118              20                      25
120 <210> SEQ ID NO: 11
121 <211> LENGTH: 48
122 <212> TYPE: PRT
123 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Fusion of Amino Terminus of SEQ ID NO: 4 to Carboxyl
126      Terminus of SEQ ID NO: 3 with Concomitant Fusion of Carboxyl
127      Terminus of SEQ ID NO:4 to Amino Terminus of Seq ID NO: 1,
128      designated T1BT*
129 <400> SEQUENCE: 11
130      Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro Asp Pro Asn Ala
131      1              5              10              15
132      Asn Pro Asn Val Asp Pro Asn Ala Asn Pro Asn Val Glu Tyr Leu Asn
133              20                      25                      30
134      Lys Ile Gln Asn Ser Leu Ser Thr Glu Trp Ser Pro Cys Ser Val Thr
135              35                      40                      45

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/716,189

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Input Set : N:\Crf3\RULE60\10716189.raw

Output Set: N:\CRF4\05232005\J716189.raw